AMENDMENTS TO THE SPECIFICATION

Please amend paragraphs 21, 22, 26, 29, 30, 34, 35, 41-43, 46, and 47 as follows:

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[0021] The method forming the subject matter of the invention is used to produce a bonded fabric out of at least two layers of a dry fiber composite semi-finished product and at least one layer of polymer. The layers are placed on top of each other initially as separate components in such a way that the resulting bonded fabric can be used to mold a preform ± of a specified shape in a draping process. The preform can also be a "pre-preform", i.e. an intermediate product used to produce a preform.

[0022] In the production method for manufacturing preforms ± of this invention, layers of a prefabricated, dry fiber composite semi-finished product and polymer layers are placed on top of each other on a working surface 60. The polymer layers ensure the bonding of those sides of the cut semi-finished product sections that face each other in overlapping areas as long as the sides do not define any exterior sides of the subsequent preform. Thus, the polymer layers have a shape that ensures bonding of interior cut semi-finished product sections as well as of those sides of the cut semi-finished product sections forming exterior sides of the preform that face each other in the overlapping areas. The polymer layers contain local recesses in order to minimize shearing stress in the area of the local recesses when forming the individual molded parts (A, B, C, D) of the bonded fabric. Figure 3, for example, shows such a bonded fabric, which contains the bonded fabric layers 3a, 3b, 3c, 3d, 3e, and 3f.

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[0026] The polymer is provided between the semi-finished product layers so as to form the bonded fabric 3. The polymer is either introduced between the layers of cut semi-finished product sections in the form of a polymer coating when placing these section layers on top of each other or is introduced between the section layers. In another procedural step, the

bonded fabric 3 is changed into the shape of the preform ǂ that is supposed to be produced through a draping process. The bonded fabric 3 can be positioned on an appropriate curing tool 70, which contains suitable edges or resting surfaces in order to provide for the draping process. In the subsequent curing step, the preform ǂ is cured based on the state of the art. The preform ǂ can then be used to form the component that is supposed to be produced.

[0029] The design specification for forming the cut semi-finished product sections, and possibly the cut polymer coating sections, is defined in such a way that, in a specific arrangement of the cut sections or the bonded fabric layers, the formation of the preform ǂ that is supposed to be produced is possible and can be achieved in subsequent procedural steps.

[0030] In order to set up the preform ǂ that is supposed to be produced, layers of cut semi-finished product sections 10 and polymer layers 30 are placed on top of each other in a specified thickness and shape on a preferably even working surface 60 in a specified sequence so as to form the bonded fabric 3 (see Figure 3). The working surface 60 is preferably equipped with a separating foil 61, which can serve as a carrier for the preform. The working surface 60 is preferably equipped with a reference system or a reference device, which can be implemented, for example, through a stop 61, through a foil, or through laser pointer dots (the latter two are not shown). Additionally, the working surface 60 itself can be prepared with a polymer layer or a layer of a polymer coating in order to set the bonded fabric 3 and/or the preform ǂ while it is being processed.

[0034] In a first step in the example of Figure 3, initially, a first bonded fabric layer 3a is obtained with a first cut semi-finished product section 11. The first cut semi-finished product section has a bottom side that is positioned on the working surface 60 and a top side on which a first cut polymer coating section 31 is applied. Another polymer layer 30 can be provided

also on the bottom side of the first cut semi-finished product section 11. The first cut polymer coating section 31 can also have carrier paper or carrier foil ~~51~~ on its top side. The layer sequence resulting from this procedural step is, therefore, as follows when viewed from the working surface 60: working surface 60, optionally a separating foil 61 for setting the generated bonded fabric 30, a first cut semi-finished product section 11, a first cut polymer coating section 31 and a first carrier paper or carrier foil ~~51~~.

[0035] In a subsequent step, the carrier paper or carrier foil ~~51~~ is removed, and a second cut semi-finished product section 12 is applied. As with the first cut semi-finished product section 11, this section 12 may or may not already contain a second or additional cut polymer coating layer 32. In either case, the second cut polymer coating section 32 is applied to the side of the second cut semi-finished product section 12 facing away from the first cut semi-finished product section 11. Additionally, another or third cut polymer coating layer ~~32b~~ can be applied to the bottom side of this cut semi-finished product section 12 (this configuration is not shown in Figure 3). In this case, two layers of cut polymer coating sections ~~32, 32b~~ are arranged in the area between the first 11 and the second 12 cut semi-finished product sections. Basically, it is also feasible to equip all layers of cut semi-finished product sections 10, 11, 12, respectively, with a cut polymer coating section 30 only on the bottom side. Finally, combinations of the described procedures are also feasible.

[0041] Another example of a fiber composite bonded fabric ~~3~~ 4 with bonded fabric layers 4a, 4b, 4c, 4d, 4e and their handling in the production of a preform is shown in Figures 5a-5c. The bonded fabric layer 4a contains a cut semi-finished product section 21, on top of which a cut polymer coating section 41 is located. The bonded fabric layer 4b contains a cut semi-finished product section 22, on top of which a cut polymer coating section 42 is located. The bonded fabric layer 4c contains a cut semi-

finished product section 23, and the bonded fabric layer 4d contains a cut polymer coating section 44, on top of which a cut semi-finished product section 24 is located. The bonded fabric layer 4e contains a cut polymer coating section 45, on top of which a cut semi-finished product section 25 is located.

[0042] The set up of the bonded fabric ~~3~~ 4 and/or the preform P in Figures 5a-5c is as follows: on the working surface 60 and/or the curing tool ~~70~~, initially, a first cut semi-finished product section 21 is located. In its level dimension, the first cut semi-finished product section corresponds to the surface of an inner overlapping area 38b of the bonded fabric 4. Then, in the direction leading away from the working surface, a cut polymer coating section ~~21~~ 41 of the same level dimension follows, as do a second cut semi-finished product section ~~42~~ 22 that protrudes beyond the overlapping area 38b on a first side, a second cut polymer coating section 42 with a level dimension between the dimension of the overlapping area 38b and the level dimension of the second, protruding cut semi-finished product section 22, another cut semi-finished product section 23 with a level dimension corresponding to the surface of the inner overlapping area 38b, another cut polymer coating section 44 with the level dimension of the cut polymer coating section 42, a cut semi-finished product section 24 with the level dimension of the cut semi-finished product section 22, a fourth cut polymer layer section ~~24~~ 45, and a fifth cut semi-finished product section 25 with level dimensions corresponding to the surface of the inner overlapping area 38b.

[0043] This means that parts of individual bonded fabric layers 4b, 4d, namely areas of the cut semi-finished product sections 22 and 24 and the cut polymer coating sections 42 and 44, protrude beyond an inner overlapping area 38b, as determined by the longitudinally extended area of a plurality of bonded fabric layers 4a, 4c, 4e. These layers can then form a connecting part D and a reinforcement part or rib C as well as base layers A and B. The inner overlapping area 38b, which

subsequently forms a connecting part D, is determined by the bonded fabric area, which is supposed to be treated as a whole in the production of the preform. This means that its layers are not separated in subsequent steps for the production of the preform ~~1~~. In this area 38b, the semi-finished product layers 22, 23, and 24 form inner layers. The protruding areas of the cut polymer coating sections 42 and 44 are arranged between the protruding areas of the cut semi-finished product sections 22 and 24 so that they can rest against each other after being adjacent to each other (Figure 5b) although they do not have to represent immediately adjacent layers in the starting situation. And again, those sides that do not form outer sides of the preform that is supposed to be produced are placed against each other and bonded with polymer layers.

[0046] Then, in a subsequent step, the preform ~~1~~ is impregnated with additional polymer and cured. Additional polymer is injected or applied otherwise during the preform curing process. This also includes polymer based on the state of the art, e.g. epoxy, polyester, polyimide or polyamide polymers. Any random method based on the state of the art can be employed. In particular, the polymer required for this process can be applied with the so-called resin film infusion method (RFI) in the form of the above-mentioned polymer coatings. It is also possible to apply infusion techniques for the infusion of liquid polymer such as resin transfer molding (RTM) or the resin infusion (RI) method. The applicability of the respective methods depends on the compatibility of the various polymer systems that are used. If this factor is given, two or more different polymer systems can be used, wherein each epoxy resin system melts at a certain temperature. If polymer systems are used that basically have the same chemical composition, they can be mixed as well so that different polymers can be used in one component.

[0047] The polymer that is used for impregnation can be identical to the polymer that is used for the production of the

preform P. However, basically, it is sufficient if both polymers are chemically compatible, i.e. if they enter into a suitable chemical reaction for the production of the fiber composite component.